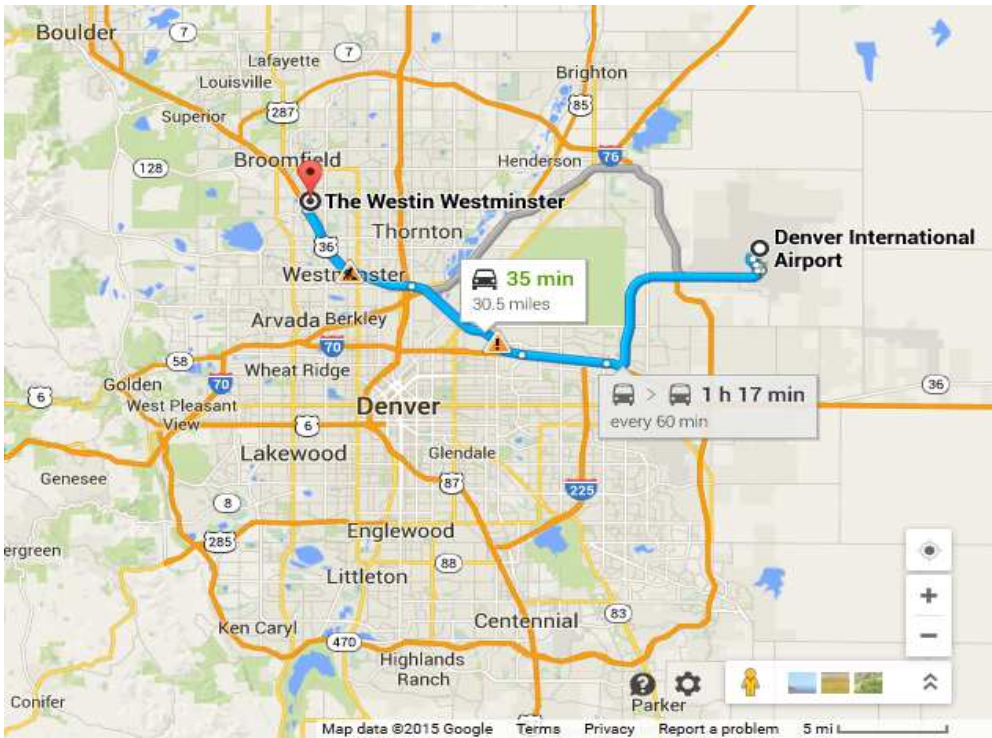


| | Monday, May 11, 2015 | Tuesday, May 12, 2015 | Wednesday, May 13, 2015 | Thursday, May 14, 2015 |
|-----------------|---|---|---|--|
| | Standley I Westminster II Westminster I Standley II | Standley I Westminster II Westminster I Standley II | Standley I Westminster II Westminster I Standley II | Standley I Westminster II Westminster I Standley II |
| 8:00a - 9:00a | GTO Senior Leadership Team Plenary Session (room: Westminster III & IV) | | | |
| 9:00a - 9:30a | Mike Pacheco, NREL Geothermal's Role in an "All of the Above" Energy Strategy room: Westminster III & IV | | | |
| 9:30a - 10:00a | Lauren Boyd, DOE Frontier Observatory of Research and Geothermal Energy (FORGE) room: Westminster III & IV | | | |
| 10:00a - 10:30a | Marianne Walck, Sandia National Laboratory Subsurface Engineering R&D Crosscut (SubTER): adaptive control of fractures and fluid flow room: Westminster III & IV | | | |
| 10:30a - 11:00a | Systems Analysis: Systems Analysis, Resources Assessment, Data System Development & Population, Education | Low Temp: Hybrid/Value Added Systems | Low Temp: Mineral Recovery | Low Temp: Low Temperature, Co- Production Demonstration |
| 11:00a - 11:30a | HRC: Reservoir Fracture Characterization & Fluid Imaging | HRC: Exploration Validation / Play Fairway Analysis | HRC: Systems Analysis, Resources Assessment, Data System Development & Population, Education | HRC: Tracers / Zonal Isolation / Geochemistry |
| 11:30a - 12:00a | EGS: Tracers / Zonal Isolation / Geochemistry | EGS: High Temp Tools, Drilling Systems | EGS: cont'd Reservoir Modeling | EGS: cont'd Reservoir Fracture Characterization & Fluid Imaging |
| 12:00p - 12:40p | EGS: Innovative Stimulation Techniques | EGS: Enhanced Geothermal System Demonstrations | HRC: High Temp Tools, Drilling Systems | No Meetings |
| 12:40p - 2:00p | EGS: Supercritical Carbon Dioxide/Working Fluids | | | |
| 2:00p - :230p | Lunch - Tim Reinhardt, DOE Vision Study room: Westminster III & IV | Lunch - Michael Weathers, DOE Play Fairway RFI Session room: Westminster III & IV | Lunch - Erick Burns, USGS New Tools for Understanding Heat and Groundwater Flow in the Northwest Volcanic Aquifer Province, USA room: Westminster III & IV | Lunch - GTO Senior Leadership Team FY16 Lab AOP Session room: Westminster III & IV |
| 2:30p - 3:00p | | | | Industry Play Fairway Workshop - Request for Information |
| 3:00p - 3:30p | | | | Code Comparison Workshop |
| 3:30p - 4:00p | | | | |
| 4:00p - 4:30p | HRC: Exploration Validation / Play Fairway Analysis | | EGS: Reservoir Fracture Characterization & Fluid Imaging | |
| 4:30p - 5:00p | EGS: High Temp Tools, Drilling Systems | EGS: Reservoir Modeling | DOE Resource Reporting Methodology Effort - Update/Discussion | DOE Resource Reporting Methodology Effort - Update/Discussion |
| 5:00p - 5:40p | EGS: Enhanced Geothermal System Demonstrations | Play Fairway Focus Discussion with PFA Award Recipients | | |
| 5:40p - 8:00p | Poster Session | | | |



print date 02/26/2015

Notes

| U.S. DEPARTMENT OF ENERGY | | Energy Efficiency & Renewable Energy | | GEOTHERMAL TECHNOLOGIES OFFICE | | | | Monday May 11 | | | | The Westin Westminster 303-410-5000 10600 Westminster Blvd, Westminster CO 80020 | | | |
|--|---|--|--|-----------------------------------|--|--|-----------------------|---|---|--|---|---|---|--|--|
| | | | | May 11-14 2015 Peer Review Agenda | | | | print date 02/26/2015 | | | | | | | |
| Track 1-Systems Analysis & LowTemp - Room Standley I | | | | Track 2 HRC - Room Westminster II | | | | Track 3 EGS1 - Room Westminster I | | | | Track 4 EGS2 - Room Standley II | | | |
| Time | Panel | Presenter(s), Awardee (or Organization), Project Title | | Time | Panel | Presenter(s), Awardee (or Organization), Project Title | | Time | Panel | Presenter(s), Awardee (or Organization), Project Title | | Time | Panel | Presenter(s), Awardee (or Organization), Project Title | |
| 8:00a-9:00a 60 min | | GTO Senior Leadership Team Plenary Session room: Westminster III & IV | | 8:00a-9:00a 60 min | | GTO Senior Leadership Team Plenary Session room: Westminster III & IV | | 8:00a-9:00a 60 min | | GTO Senior Leadership Team Plenary Session room: Westminster III & IV | | 8:00a-9:00a 60 min | | GTO Senior Leadership Team Plenary Session room: Westminster III & IV | |
| 9:00a-9:30a 30 min | Systems Analysis: Systems Analysis, Resources Assessment, Data System Development & Population, Education | Tom Lowry, SNL Geothermal Systems Engineering and Analysis | | 9:00a-9:30a 30 min | HRC: Reservoir Fracture Characterization & Fluid Imaging | Rob Mellors, LLNL Stochastic Joint Inversion for Integrated Data Interpretation in Geothermal Exploration | | 9:00a-9:30a 30 min | EGS: Tracers / Zonal Isolation / Geochemistry | Lyle Burns, Clean Tech Innovations, LLC SPI Conformance Gel Applications in Geothermal Zonal Isolation | | 9:00a-9:30a 30 min | EGS: Innovative Stimulation Techniques | Carlos Fernandez, PNNL Reservoir Stimulation Optimization with Operational Monitoring for Creation of EGS | |
| 9:30a-10:00a 30 min | | Steve Weakley, PNNL Technology Tracking | | 9:30a-10:00a 30 min | | Dr Andre Revil, Colorado School of Mines Time-lapse joint inversion of GEOphysical Data and its application to gEothermal prospecting - GEODE | | 9:30a-10:00a 30 min | | Jefferson Tester, Cornell University A Reactive Tracer Method for Predicting EGS Reservoir Geometry and Thermal Lifetime: Development and Field Validation | | 9:30a-10:00a 30 min | | Mark Grubelich, SNL Gas Generator Development and Testing for Controlled Rapid Pressurization Using Liquid Propellants for EGS Well Stimulation | |
| 10:00a-10:30a 30 min | | Greg Mines, INL GETEM | | 10:00a-10:30a 30 min | | Robert Mellors, LLNL Identifying High Potential Well Targets with 3D Seismic, and Mineralogy | | 10:00a-10:30a 30 min | | John Christensen, LBNL Radioisotope Tracers and Fracture Attributes for Enhanced Geothermal Systems | | 10:00a-10:30a 30 min | | Charles Carrigan, LLNL Validation of EGS Feasibility and Explosive Fracturing Techniques | |
| 10:30a-10:40a 10 min | | Audience Q&A | | 10:30a-10:40a 10 min | | Audience Q&A | | 10:30a-10:40a 10 min | | Audience Q&A | | 10:30a-10:40a 10 min | | Audience Q&A | |
| 10:40a-11:00a 20 min | | Break | | 10:40a-11:00a 20 min | | Break | | 10:40a-11:00a 20 min | | Break | | 10:40a-11:00a 20 min | | Break | |
| 11:00a-11:30a 30 min | | Tom Lowry, SNL GT-Mod | | 11:00a-11:30a 30 min | | Chad Augustine, NREL SURGE: Sedimentary Geothermal Feasibility Study | | 11:00a-11:30a 30 min | | Richard A. Kemp, SNL Tagged Nanoparticles for Fluid Flow Monitoring | | 11:00a-11:30a 30 min | Wrap Up: Innovative Stimulation Techniques Session | | |
| 11:30a-12:00p 30 min | | Thomas Edmunds, LLNL The Value of Geothermal Power for Integration of Intermittent Generation | | 11:30a-12:00p 30 min | | Lianjie Huang, LANL Imaging Fault Zones Using a Novel Elastic Reverse-Time Migration Imaging Technique | | 11:30a-12:00p 30 min | | Toshi Sugama, BNL Temporary Sealer Materials | | 11:30a-12:00p 30 min | EGS: Supercritical Carbon Dioxide/Working Fluids | Curt Oldenburg, LBNL Push-pull well testing using CO2 with active source geophysical monitoring | |
| 12:00p-12:30p 30 min | | Jordan Macknick, NREL Projected Deployment of Geothermal Technologies Subject to Water Availability Constraints | | 12:00p-12:30p 30 min | | Chad Augustine, NREL SURGE: Completing Horizontal Geothermal Wells | | 12:00p-12:30p 30 min | | Kevin Knauss, LBNL Fluid Chemistry and Fracture Growth: What's the Connection? | | 12:00p-12:30p 30 min | | Tom Buscheck , LLNL Active Management of Integrated Geothermal CO2 Storage Reservoirs in Sedimentary Formations | |
| 12:30p-12:40p 10 min | | Audience Q&A | | 12:30p-12:40p 10 min | | Audience Q&A | | 12:30p-12:40p 10 min | | Audience Q&A | | 12:30p-12:40p 10 min | | Audience Q&A | |
| 12:40p-2:00p 80 min | | Lunch - Tim Reinhardt, DOE Vision Study room: Westminster III & IV | | 12:40p-2:00p 80 min | | Lunch - Tim Reinhardt, DOE Vision Study room: Westminster III & IV | | 12:40p-2:00p 80 min | | Lunch - Tim Reinhardt, DOE Vision Study room: Westminster III & IV | | 12:40p-2:00p 80 min | | Lunch - Tim Reinhardt, DOE Vision Study room: Westminster III & IV | |
| 2:00p-2:30p 30 min | | Chad Augustine, NREL Strategic Analysis | | 2:00p-2:30p 30 min | Wrap up: Reservoir Fracture Characterization & Fluid Imaging | | 2:00p-2:30p 30 min | Wrap Up: Tracers / Zonal Isolation / Geochemistry Session | | 2:00p-2:30p 30 min | Barry Freifeld, LBNL Geothermal Energy Production Coupled with CCS: Heat Recovery Using an Innovative High Efficiency Supercritical CO2 Turboexpansion Cycle | | | | |
| 2:30p-3:00p 30 min | Systems Analysis: Systems Analysis, Resources Assessment, Data System Development & Population, Education | Dan Getman, NREL Geothermal Prospector | | 2:30p-3:00p 30 min | HRC: Exploration Validation / Play Fairway Analysis | James Faulds, Nevada Bureau of Mines and Geology, University of Nevada-Reno Discovering Blind Geothermal Systems in the Great Basin Region: An Integrated Geologic and Geophysical Approach for Establishing Geothermal Play Fairways | | 2:30p-3:00p 30 min | EGS: High Temp Tools, Drilling Systems | Kamalesh Chatterjee, Baker Hughes Oilfield Operations Incorporated Recovery Act: High Temperature 300C Directional Drilling System, including drill bit, steerable motor, and drilling fluid, for Enhanced Geothermal Systems | | 2:30p-2:40p 10 min | EGS: Enhanced Geothermal System Demonstrations | Audience Q&A | |
| 3:00p-3:30p 30 min | | Chad Augustine, NREL Geothermal Resource Potential and Supply Curve Improvement | | 3:00p-3:30p 30 min | | Nicole Lautze, University of Hawaii Comprehensive analysis of Hawaii's geothermal potential through Play Fairway integration of geophysical, geochemical, and geological data | | 3:00p-3:30p 30 min | | Ken Waterman, DRAKA CABLETEQ USA, INC. Recovery Act: Complete Fiber/Copper Cable Solution for Long-Term Temperature and Pressure Measurement in Supercritical Reservoirs and EGS Wells | | 3:10p-3:40p 30 min | | Wrap Up: Supercritical Carbon Dioxide / Working Fluids Session | |
| 3:30p-3:40p 10 min | | Audience Q&A | | 3:30p-3:40p 10 min | | Audience Q&A | | 3:30p-3:40p 10 min | | Audience Q&A | | 3:40p-4:00p 20 min | | Break | |
| 3:40p-4:00p 20 min | | Break | | 3:40p-4:00p 20 min | | Break | | 3:40p-4:00p 20 min | | Break | | 3:40p-4:00p 20 min | | Break | |
| 4:00p-4:30p 30 min | | Katherine Young, NREL Regulatory Roadmap | | 4:00p-4:30p 30 min | | Patrick Walsh, ORMAT Nevada, Inc. Recovery Act: Merging high resolution geophysical and geochemical surveys to reduce exploration risk at Glass Buttes, Oregon | | 4:00p-4:30p 30 min | | Kamalesh Chatterjee, Baker Hughes Oilfield Operations Incorporated Directional Measurement-While-Drilling System for Geothermal Applications | | 4:00p-4:30p 30 min | | Joseph Moore, University of Utah Concept Testing and Development at the Raft River Geothermal Field, Idaho | |
| 4:30p-5:00p 30 min | | Colin Williams, U.S. Geological Survey National Geothermal Resource Assessment and Classification | | 4:30p-5:00p 30 min | | Lisa Shevenell, Atlas Geosciences Inc. Geothermal Potential of the Cascade and Aleutian Arcs, with Ranking of Individual Volcanic Centers for their Potential to Host Electricity-Grade Reservoirs | | 4:30p-5:00p 30 min | | Dr. Bjorn Paulsson, Paulsson, Inc. Development of a 300°C, 200 level, 3C Fiber Optic Downhole Seismic Receiver Array for Surveying and Monitoring of Geothermal Reservoirs | | 4:30p-5:00p 30 min | Mitch Plummer, INL EGS Reservoir Stimulations and Long-Term Performance Modeling | | |
| 5:00p-5:10p 10 min | | Audience Q&A | | 5:00p-5:10p 10 min | | Patrick Walsh, ORMAT Nevada, Inc. Recovery Act: Blind Geothermal System Exploration in Active Volcanic Environments | | 5:00p-5:30p 30 min | | Darren Laughlin, A-Tech Corporation Rotation-Enabled 7-DOF Seismometer for Geothermal Resource Development | | 5:00p-5:30p 30 min | Lianjie Huang, LANL Joint Active and Passive Seismic Imaging of EGS Reservoirs | | |
| 5:10p-5:40p 30 min | | Wrap up: Systems Analysis Session | | 5:30p-5:40p 10 min | | Audience Q&A | | 5:30p-5:40p 10 min | | Audience Q&A | | 5:30p-5:40p 10 min | Audience Q&A | | |

| U.S. DEPARTMENT OF ENERGY | | Energy Efficiency & Renewable Energy | | GEOTHERMAL TECHNOLOGIES OFFICE | | | | Tuesday May 12 | | The Westin Westminster 303-410-5000 10600 Westminster Blvd, Westminster CO 80020 | | | | | |
|--|--|--|------------------------|---|--|--|---|-----------------------------------|---|--|--|---------------------------------|---|--|--|
| May 11-14 2015 Peer Review Agenda | | | | | | | | | | | | | | | |
| print date 02/26/2015 | | | | | | | | | | | | | | | |
| Track 1-Systems Analysis & LowTemp - Room Standley I | | | | Track 2 HRC - Room Westminster II | | | | Track 3 EGS1 - Room Westminster I | | | | Track 4 EGS2 - Room Standley II | | | |
| Time | Panel | Presenter(s), Awardee (or Organization), Project Title | | Time | Panel | Presenter(s), Awardee (or Organization), Project Title | | Time | Panel | Presenter(s), Awardee (or Organization), Project Title | | Time | Panel | Presenter(s), Awardee (or Organization), Project Title | |
| 8:00a-9:00a 60 min | | Mike Pacheco, NREL Geothermal's Role in an "All of the Above" Energy Strategy room: Westminster III & IV | | 8:00a-9:00a 60 min | | Mike Pacheco, NREL Geothermal's Role in an "All of the Above" Energy Strategy room: Westminster III & IV | | 8:00a-9:00a 60 min | | Mike Pacheco, NREL Geothermal's Role in an "All of the Above" Energy Strategy room: Westminster III & IV | | 8:00a-9:00a 60 min | | Mike Pacheco, NREL Geothermal's Role in an "All of the Above" Energy Strategy room: Westminster III & IV | |
| 9:00a-9:30a 30 min | Low Temp: Hybrid/Value Added Systems | Craig Turchi, NREL Low-Enthalpy Geothermal Desalination | | 9:00a-9:30a 30 min | HRC: Exploration Validation / Play Fairway Analysis | John Shervais, Utah State University Play Fairway Analysis of the Snake River Plain | | 9:00a-9:30a 30 min | cont'd -- EGS: High Temp Tools, Drilling Systems | Randy Norman, Perma Works Well Monitoring Systems for EGS | | 9:00a-9:30a 30 min | cont'd -- EGS: Enhanced Geothermal System Demonstrations | Susan Petty, AltaRock Energy, Inc. Recovery Act: Newberry Volcano EGS Demonstration | |
| 9:30a-10:00a 30 min | | David. J. Heldebrant, PNNL Geothermal Power Generation and CO2 Capture Co-Production | | 9:30a-10:00a 30 min | | James McClain, University of California-Davis Geothermal Play Fairway Analysis of Potential Geothermal Resources in NE California, NW Nevada, and Southern Oregon | | 9:30a-10:00a 30 min | | Grzegorz Cieslewski, SNL High Temperature Chemical Sensing Tool for Distributed Mapping of Fracture Flow in EGS | | 9:30a-10:00a 30 min | | Eric Sonnenthal, LBNL Evaluation of Stimulation at Newberry Volcano EGS Demo Site Through Natural Isotopic Reactive Tracers and Geochemical Investigation | |
| 10:00a-10:30a 30 min | | Pete McGrail, PNNL Integrating Compressed Air Energy Storage and Geothermal for Grid-Scale Renewables Integration | | 10:00a-10:30a 30 min | | David Norman, Washington Division of Geology and Earth Resources Geothermal Play-Fairway Analysis of Washington State Prospects | | 10:00a-10:30a 30 min | | David Raymond, SNL High Temperature Downhole Motor | | 10:00a-10:30a 30 min | | Peter Drakos, Ormat Nevada, Inc. Feasibility of EGS Development at Bradys Hot Springs, Nevada | |
| 10:30a-10:40a 10 min | | Audience Q&A | | 10:30a-10:40a 10 min | | Audience Q&A | | 10:30a-10:40a 10 min | | Audience Q&A | | 10:30a-10:40a 10 min | | Audience Q&A | |
| 10:40a-11:00a 20 min | | Break | | 10:40a-11:00a 20 min | | Break | | 10:40a-11:00a 20 min | | Break | | 10:40a-11:00a 20 min | | Break | |
| 11:00a-11:30a 30 min | | Dan Wendt, INL & Craig Turchi, NREL Geothermal risk reduction via geothermal/solar hybrid power plants | | 11:00a-11:30a 30 min | | Phil Wannamaker, University of Utah/EGI Structurally Controlled Geothermal Systems in the Central Cascadia Arc-BackArc Regime, Oregon | | 11:00a-11:30a 30 min | | Grzegorz Cieslewski, SNL Enhanced High Temperature/High Speed Data Link for Logging Cables | | 11:00a-11:30a 30 min | | Sharad Kelkar, LANL Bradys and Desert Peak Numerical Modeling | |
| 11:30a-12:00p 30 min | | Greg Mines, INL Forward Osmosis Purification of Co-Produced Water | | 11:30a-12:00p 30 min | | Teresa Jordan, Cornell University Low Temperature Geothermal Play Fairway Analysis for the Appalachian Basin | | 11:30a-12:00p 30 min | | Toshi Sugama, BNL & Doug Blankenship, SNL Elastomeric Material Evaluation and Development | | 11:30a-12:00p 30 min | | Nicholas Davatzes, Temple University Monitoring EGS Stimulation and Reservoir Dynamics with InSAR and MEQ | |
| 12:00p-12:30p 30 min | | Pete McGrail, PNNL Development of New Biphasic Metal Organic Working Fluids for Geothermal Systems | | 12:00p-12:30p 30 min | | Phil Wannamaker , University of Utah/EGI Structurally Controlled Geothermal Systems in the Eastern Great Basin Extensional Regime, Utah | | 12:00p-12:30p 30 min | | Grzegorz Cieslewski, SNL Evaluation of High Temperature Components for Use in Geothermal Tools | | 12:00p-12:30p 30 min | | Kurt Feigl, University of Wisconsin-Madison Poroelastic Tomography by Adjoint Inverse Modeling of Data from Seismology, Geodesy, and Hydrology | |
| 12:30p-12:40p 10 min | | Audience Q&A | | 12:30p-12:40p 10 min | | Audience Q&A | | 12:30p-12:40p 10 min | | Audience Q&A | | 12:30p-12:40p 10 min | | Audience Q&A | |
| 12:40p-2:00p 80 min | | Lunch - Michael Weathers, DOE Play Fairway RFI Session room: Westminster III & IV | | 12:40p-2:00p 80 min | | Lunch - Michael Weathers, DOE Play Fairway RFI Session room: Westminster III & IV | | 12:40p-2:00p 80 min | | Lunch - Michael Weathers, DOE Play Fairway RFI Session room: Westminster III & IV | | 12:40p-2:00p 80 min | | Lunch - Michael Weathers, DOE Play Fairway RFI Session room: Westminster III & IV | |
| 2:00p-2:30p 30 min | Wrap up: Hybrid/Value Added Systems Session | Yarom Polsky, ORNL Freeform Heat Exchangers for Binary Geothermal Power Plants | | 2:00p-2:30p 30 min | HRC: Exploration Validation / Play Fairway Analysis | Jerry Smith, Pagosa Verde LLC Recovery Act: Use Remote Sensing Data (selected visible and infrared spectrums) to locate high temp ground anomalies in Colorado.Confirm heat flow potential w/ on-site temp surveys to drill deep resource wells | | 2:00p-2:30p 30 min | cont'd -- EGS: High Temp Tools, Drilling Systems | Ernest L. Majer, LBNL Testing and Calibration of HT Wide-bandwidth Seismic Sensors for EGS Applications and Collaboration with IPGT Program | | 2:00p-2:30p 30 min | cont'd -- EGS: Enhanced Geothermal System Demonstrations | Mark Walters, Calpine - Geysers Power Company LLC Demonstration of an Enhanced Geothermal System at the Northwest Geysers Geothermal Field, California | |
| 2:30p-2:40p 30 min | | Audience Q&A | | 2:30p-3:00p 30 min | | Dr. Greg Nash (PI) & Carlon Bennett, Ruby Mountain Inc. The Convergence of Heat, Groundwater, & Fracture Permeability: Innovative Play Fairway Modelling Applied to the Tularosa Basin | | 2:30p-3:00p 30 min | | Grzegorz Cieslewski, SNL Deployment of Integrated Wide Bandgap Sensor, HT Packaging, and Data Communication System | | 2:30p-3:00p 30 min | | Jonny Rutqvist, LBNL Geysers Calpine Modeling | |
| 2:40p-3:10p 10 min | | | | 3:00p-3:30p 30 min | | Richard Stephen Middleton, LANL Hydrogeologic windows: Regional Signature Detection for Blind and Traditional Geothermal Play Fairways | | 3:00p-3:10p 10 min | | Audience Q&A | | 3:00p-3:30p 30 min | | Sharad Kelkar, LANL Archive of Fenton Hill Data; Creation and Testing of Data Sets for Simulation and Testing | |
| 3:10p-3:40p 30 min | | | | 3:30p-3:40p 10 min | | Audience Q&A | | 3:10p-3:40p 30 min | | Wrap Up: High Temp Tools, Drilling Systems Session | | 3:30p-3:40p 10 min | | Audience Q&A | |
| 3:40p-4:00p 20 min | Break | | 3:40p-4:00p 20 min | Break | | 3:40p-4:00p 20 min | Break | | | 3:40p-4:00p 20 min | Break | | | | |
| 4:00p-4:30p 30 min | | | 4:00p-4:30p 30 min | Gregory Newman, LBNL Iceland Geophysics: Advanced 3D Geophysical Imaging Technologies for Geothermal Resource Characterization | | 4:00p-4:30p 30 min | George Danko, University of Nevada, Reno Recovery Act: A New Analytic-Adaptive Model for EGS Assessment, Development and Management Support | | | 4:00p-4:30p 30 min | Wrap Up: Enhanced Geothermal System Demonstrations Session | | | | |
| 4:30p-5:00p 30 min | | | 4:30p-4:40p 10 min | Audience Q&A | | 4:30p-5:00p 30 min | Eric Sonnenthal, LBNL ARRA THMC Modeling | | | 4:30p-5:00p 30 min | | | | | |
| 5:00p-5:30p 30 min | | | 5:10p-5:40p 30 min | Wrap up: Exploration Validation / Play Fairway Analysis Session | | 5:00p-5:30p 30 min | EGS: Reservoir Modeling Dr. Ahmad Ghassemi, Texas Engineering Experiment Station (Texas A&M University) ① Recovery Act: Development of a Geomechanical Framework for the Analysis of MEQ in EGS Experiments (GEYSERS) ② Analysis of Geothermal Reservoir Stimulation using Geomechanics-Based Stochastic Analysis of Injection-Induced Seismicity ③ Three-dimensional Modeling of Fracture Clusters in Geothermal Reservoirs | | 5:00p-5:30p 30 min | | | | | | |
| 5:30p-5:40p 10 min | | | | | | 5:30p-5:40p 10 min | Audience Q&A | | 5:30p-5:40p 10 min | | | | | | |
| 5:40p-8:00p 140 min | Poster Session Networking Event in Westminster Foyer | | 5:40p-8:00p 140 min | Poster Session Networking Event in Westminster Foyer | | 5:40p-8:00p 140 min | Poster Session Networking Event in Westminster Foyer | | 5:40p-8:00p 140 min | Poster Session Networking Event in Westminster Foyer | | | | | |

| Track 1-Systems Analysis & LowTemp - Room Standley I | | | Track 2 HRC - Room Westminster II | | | Track 3 EGS1 - Room Westminster I | | | Track 4 EGS2 - Room Standley II | | |
|--|---|--|--|---|--|---|--|---|--|-------|--|
| Time | Panel | Presenter(s), Awardee (or Organization), Project Title | Time | Panel | Presenter(s), Awardee (or Organization), Project Title | Time | Panel | Presenter(s), Awardee (or Organization), Project Title | Time | Panel | Presenter(s), Awardee (or Organization), Project Title |
| 8:00a-9:00a 60 min | | Lauren Boyd, DOE Frontier Observatory of Research and Geothermal Energy (FORGE) room: Westminster III & IV | 8:00a-9:00a 60 min | | Lauren Boyd, DOE Frontier Observatory of Research and Geothermal Energy (FORGE) room: Westminster III & IV | 8:00a-9:00a 60 min | | Lauren Boyd, DOE Frontier Observatory of Research and Geothermal Energy (FORGE) room: Westminster III & IV | No Meetings | | |
| 9:00a-9:30a 30 min | Low Temp: Mineral Recovery | Jay Renew, Southern Research Institute Geothermal Thermoelectric Generation (G-TEG) with Integrated Temperature Driven Membrane Distillation and Novel Manganese Oxide for Lithium Extraction | 9:00a-9:30a 30 min | HRC: Systems Analysis, Resources Assessment, Data System Development & Population, | Patrick Dobson, LBNL & Katherine Young, NREL Resource Reporting Methodology Analysis and Development of Geothermal Resource Reporting Metric for GTO’s Hydrothermal Program | 9:00a-9:30a 30 min | cont'd -- EGS: Reservoir Modeling | Mack Kennedy, LBNL & Doug Blankenship, SNL Validation of EGS Feasibility, Validation of EGS Feasibility through Predictive Analysis | | | |
| 9:30a-10:00a 30 min | | Susanna Ventura, SRI International Selective Recovery of Metals From Geothermal Brines | 9:30a-10:00a 30 min | | Greg Mines, INL Hydrothermal Reservoir Productivity | 9:30a-10:00a 30 min | | Mark White, PNNL Support of the DOE GTO Model Comparison Activity | | | |
| 10:00a-10:30a 30 min | | Robert Zierenberg, University of California - Davis Maximizing REE Recovery in Geothermal Systems | 10:00a-10:10a 10 min | | Audience Q&A | | | 10:00a-10:30a 30 min | Dr. Derek Elsworth, Pennsylvania State University Recovery Act: THMC Modeling of EGS Reservoirs - Continuum through Discontinuum Representations: Capturing Reservoir Stimulation, Evolution and Induced Seismicity | | |
| 10:30a-10:40a 10 min | | Audience Q&A | | | 10:10a-10:40a 30 min | Wrap up: Systems Analysis, Resources Assessment, Data System Development & Population, Education Session | | 10:30a-10:40a 10 min | Audience Q&A | | |
| 10:40a-11:00a 20 min | | Break | | 10:40a-11:00a 20 min | Break | | 10:40a-11:00a 20 min | Break | | | |
| 11:00a-11:30a 30 min | | Athanasios Karamalidis, Carnegie Mellon University Chelating Resins for Selective Separation and Recovery of Rare Earth Elements from Low Temperature Geothermal Water | 11:00a-11:30a 30 min | HRC: High Temp Tools, Drilling Systems | Dale Wolfer, Atlas Copco Secoroc LLC Advanced Percussive Drilling Technology for Geothermal Exploration and Development | 11:00a-11:30a 30 min | Wrap Up: Reservoir Modeling Session | | | | |
| 11:30a-12:00p 30 min | | Raymond Addleman, PNNL Recovery of Rare Earths, Precious Metals and Other Critical Materials from Geothermal Waters with Advanced Sorbent Structures | 11:30a-12:00p 30 min | | Charlie Visser, NREL SURGE: Geothermal Drilling and Completions: Petroleum Practices Technology Transfer | 11:30a-12:00p 30 min | EGS: Reservoir Fracture Characterization & Fluid Imaging | Tim Kneafsey, LBNL Sustainability of Shear-Induced Permeability for EGS Reservoirs | | | |
| 12:00p-12:30p 30 min | | Dean Stull, Tusaar Corp. Environmentally friendly economical sequestration of rare earth metals from geothermal waters | 12:00p-12:30p 30 min | | Toshi Sugama, BNL Multifunctional Corrosion -resistant Foamed Cement Composites | 12:00p-12:30p 30 min | | Susan Carroll, LLNL Viability of Sustainable, Self-Propping Shear Zones in EGS: Measurement of Reaction Rates at Elevated Temperatures | | | |
| 12:30p-12:40p 10 min | | Audience Q&A | | | 12:30p-12:40p 10 min | Audience Q&A | | Audience Q&A | | | |
| 12:40p-2:00p 80 min | | Lunch - Erick Burns, USGS New Tools for Understanding Heat and Groundwater Flow in the Northwest Volcanic Aquifer Province, USA room: Westminster III & IV | 12:40p-2:00p 80 min | | Lunch - Erick Burns, USGS New Tools for Understanding Heat and Groundwater Flow in the Northwest Volcanic Aquifer Province, USA room: Westminster III & IV | 12:40p-2:00p 80 min | Lunch - Erick Burns, USGS New Tools for Understanding Heat and Groundwater Flow in the Northwest Volcanic Aquifer Province, USA room: Westminster III & IV | | | | |
| 2:00p-2:30p 30 min | Caroline Ajo-Franklin, LBNL Engineering Thermophilic Microorganisms to Selectively Extract Strategic Metals from Low Temperature Geothermal Brines | 2:00p-2:30p 30 min | George Trabits, Trabits Group, LLC Recovery Act: Development Of An Improved Cement For Geothermal Wells | 2:00p-2:30p 30 min | EGS: Reservoir Fracture Characterization & Fluid Imaging | Dr. Ahmad Ghassemi, The Board of Regents of the University of Oklahoma Laboratory-Scale Characterization of EGS Reservoirs | | | | | |
| 2:30p-3:00p 30 min | Pete McGrail, PNNL Magnetic Partitioning Nanofluid for Rare Earth Extraction from Geothermal Fluids | 2:30p-3:00p 30 min | Douglas Blankenship, SNL Drilling Technologies Evaluation | 2:30p-3:00p 30 min | | Joe Moore, University of Utah Novel Geothermal Development of Deep Sedimentary systems in the US | | | | | |
| 3:00p-3:30p 30 min | Stephen Harrison, Simbol Materials Determination of Rare Earths in Geothermal Brines and Evaluation of Potential Extraction Techniques | 3:00p-3:10p 10 min | Audience Q&A | | | 3:00p-3:30p 30 min | Dr. Derek Elsworth, The Pennsylvania State University Surface and Subsurface Geodesy Combined with Active Borehole Experimentation for the Advanced Characterization of EGS Reservoirs | | | | |
| 3:30p-3:40p 10 min | Audience Q&A | | Wrap up: High Temp Tools and Drilling Systems Session | | | 3:30p-3:40p 10 min | Audience Q&A | | | | |
| 3:40p-4:00p 20 min | Break | | 3:40p-4:00p 20 min | Break | | 3:40p-4:00p 20 min | Break | | | | |
| 4:00p-4:30p 30 min | Wrap up: Mineral Recovery Session | | 4:00p-5:40p 100 min | NREL/LBNL DOE Resource Reporting Methodology Effort-Update/Discussion | | 4:00p-4:30p 30 min | Dr. Chris Marone, The Pennsylvania State University Leveraging a Fundamental Understanding of Fracture Flow, Dynamic Permeability Enhancement, and Induced Seismicity to Improve Geothermal Energy Production | | | | |
| 4:30p-5:00p 30 min | | 4:30p-5:00p 30 min | | | | Dr. Matthew Becker, California State University Long Beach Phase I Project: Fiber Optic Distributed Temperature Sensing for Periodic Hydraulic Tests | | | | | |
| 5:00p-5:30p 30 min | | 5:00p-5:30p 30 min | | | Dr. Christopher White, LA State University Geothermal Resource Development with Zero Mass Withdrawal, Engineered Convection, and Wellbore Energy Conversion | | | | | | |
| 5:30p-5:40p 10 min | | | | | 5:30p-5:40p 10 min | Audience Q&A | | | | | |

| U.S. DEPARTMENT OF ENERGY | | Energy Efficiency & Renewable Energy | | GEOHERMAL TECHNOLOGIES OFFICE | | | | Thursday May 14 | | The Westin Westminster 303-410-5000 10600 Westminster Blvd, Westminster CO 80020 | | | | | |
|--|---|--|-----------------------|-----------------------------------|--|---|-------|-----------------------------------|---|--|--|---------------------------------|-------|--|--|
| | | | | May 11-14 2015 Peer Review Agenda | | | | | | | | | | | |
| Track 1-Systems Analysis & LowTemp - Room Standley I | | | | Track 2 HRC - Room Westminster II | | | | Track 3 EGS1 - Room Westminster I | | | | Track 4 EGS2 - Room Standley II | | | |
| Time | Panel | Presenter(s), Awardee (or Organization), Project Title | | Time | Panel | Presenter(s), Awardee (or Organization), Project Title | | Time | Panel | Presenter(s), Awardee (or Organization), Project Title | | Time | Panel | Presenter(s), Awardee (or Organization), Project Title | |
| 8:00a-9:00a 60 min | | Marianne Walck, Sandia National Laboratory Subsurface Engineering R&D Crosscut (SubTER): adaptive control of fractures and fluid flow room: Westminster III & IV | | 8:00a-9:00a 60 min | | Marianne Walck, Sandia National Laboratory Subsurface Engineering R&D Crosscut (SubTER): adaptive control of fractures and fluid flow room: Westminster III & IV | | 8:00a-9:00a 60 min | | Marianne Walck, Sandia National Laboratory Subsurface Engineering R&D Crosscut (SubTER): adaptive control of fractures and fluid flow room: Westminster III & IV | | No Meetings | | | |
| 9:00a-9:30a 30 min | Low Temp: Low Temperature, Co-Production Demonstration | Chris Luchini, Universal GeoPower LLC Recovery Act: Technical Demonstration and Economic Validation of Geothermally-Produced Electricity from Coproduced Water at Existing Oil/Gas Wells in Texas | | 9:00a-9:30a 30 min | HRC: Tracers / Zonal Isolation / Geochemistry | Mark Conrad, LBNL & Earl Mattson, INL Geothermometry Mapping of Deep Hydrothermal Reservoirs in Southeastern Idaho | | 9:00a-9:30a 30 min | cont'd -- EGS: Reservoir Fracture Characterization & Fluid Imaging | Dr. Roland Gritto, Array Information Technology Seismic Analysis of Spatio-Temporal Fracture Generation During EGS Resource Development | | | | | |
| 9:30a-10:00a 30 min | | William D. Gosnold, University of North Dakota Recovery Act: Electric Power Generation from Low to Intermediate Temperature Resources | | 9:30a-10:00a 30 min | | Patrick Dobson, LBNL Use of He isotopes for geothermal resource identification in the Cascades and Snake River Plain | | 9:30a-10:00a 30 min | | Ileana Tibuleac, Board of Regents, NSHE, obo University of Nevada, Reno Quantifying EGS Reservoir Complexity with an Integrated Geophysical Approach - Improved Resolution Ambient Seismic Noise Interferometry | | | | | |
| 10:00a-10:30a 30 min | | Greg Mines, INL & Tom Williams, NREL Low Temperature Project Analysis | | 10:00a-10:30a 30 min | | Mack Kennedy, LBNL Surface estimates of deep permeability | | 10:00a-10:30a 30 min | | Stephen Bauer, SNL Laboratory Evaluation of EGS Shear Stimulation | | | | | |
| 10:30a-10:40a 10 min | | Audience Q&A | | 10:30a-10:40a 10 min | | Audience Q&A | | 10:30a-10:40a 10 min | | Audience Q&A | | | | | |
| 10:40a-11:00a 20 min | | Break | | 10:40a-11:00a 20 min | | Break | | 10:40a-11:00a 20 min | | Break | | | | | |
| 11:00a-11:30a 30 min | | Angel Sanchez, GeoTek Energy, LLC GeoTek Gravity Head Energy System Pilot Plant Project | | 11:00a-11:30a 30 min | | Nicholas Spycher, LBNL Surprise Valley Geochemistry | | 11:00a-11:30a 30 min | | Philip Bingham, ORNL & Yarom Polsky, ORNL Application of Neutron Imaging and Scattering to Fluid Flow and Fracture in EGS Environments | | | | | |
| 11:30a-11:40a 10 min | | Audience Q&A | | 11:30a-11:40a 10 min | | Eric Sonnenthal, LBNL Integration of Nontraditional Isotopic Systems Into Reaction-Transport Models of EGS For Exploration, Evaluation of Water-Rock Interaction, and Impacts of Water Chemistry on Reservoir Sustainability | | 11:30a-11:40a 10 min | | Audience Q&A | | | | | |
| 11:40a-12:10p 30 min | | Wrap up: Low Temp, Co-Production Demonstration Session | | 11:30a-12:00p 30 min | | | | 11:40p-12:10p 30 min | | Wrap Up: Reservoir Fracture Characterization & Fluid Imaging Session | | | | | |
| 12:10p-12:40p 30 min | | | | 12:00p-12:10p 10 min | | Audience Q&A | | 12:10p-12:40p 30 min | | | | | | | |
| 12:10p-12:40p 30 min | | | | 12:10p-12:40p 30 min | | Wrap up: Tracers / Zonal Isolation / Geochemistry Session | | 12:10p-12:40p 30 min | | | | | | | |
| 12:40p-2:00p 80 min | | Lunch - GTO Senior Leadership Team FY16 Lab AOP Session room: Westminster III & IV | | 12:40p-2:00p 80 min | | Lunch - GTO Senior Leadership Team FY16 Lab AOP Session room: Westminster III & IV | | 12:40p-2:00p 80 min | | Lunch - GTO Senior Leadership Team FY16 Lab AOP Session room: Westminster III & IV | | | | | |
| 2:00p-2:30p 30 min | | | | 2:00p-3:40p 100 min | | Industry Play Fairway Workshop – Request for Information | | 2:00p-3:40p 100 min | | Lauren Boyd, DOE Code Comparison Workshop | | | | | |
| 2:30p-3:00p 30 min | | | | | | | | | | | | | | | |
| 3:00p-3:30p 30 min | | | | | | | | | | | | | | | |
| 3:30p-3:40p 10 min | | | | | | | | | | | | | | | |
| 3:30p-3:40p 10 min | Break | | 3:40p-4:00p 20 min | Break | | 3:40p-4:00p 20 min | Break | | | | | | | | |
| 4:00p-5:40p 100 min | | | | | | | | | | Geochemistry/Tracers Workshop | | | | | |